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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* WILLIAM VOORHEES AND CARL GYGI

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Appeal 2008-004893  
Application 10/788,590  
Technology Center 2100

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Decided<sup>1</sup>: June 24, 2009

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Before JOSEPH L. DIXON, ST. JOHN COURTENAY III, and  
CAROLYN D. THOMAS, *Administrative Patent Judges*.

COURTENAY, Administrative Patent Judge.

*DECISION ON APPEAL*

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-9, 12-14, 17, and 18. Claims 10, 11, 15, and 16 are cancelled. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

## THE INVENTION

The disclosed invention relates to configuring ports of a storage domain. More particularly, the present invention relates to flexibly configuring ports within a Serial Attached Small Computer Systems Interface (SAS) domain component to operate according to application requirements. (Spec. 1).

Independent claim 1 is illustrative:

1. A multi-chip module (MCM) comprising:

a plurality of serial attached SCSI ("SAS") expander component circuits each having a number (n) of internal ports internal to the MCM and each having a number (m) of external ports for coupling to SAS devices external to the MCM;

an internal fabric coupling together selected ones of the internal ports in selected ones of the plurality of SAS expander component circuits wherein the configuration of coupling together of the selected ones of the internal ports is static following initialization of the MCM; and

coordination logic communicatively coupled to the plurality of SAS expander component circuits to coordinate operation of the plurality of SAS expander component circuits wherein the coordination logic is adapted to present a single

expander to devices outside the module, wherein the single expander performs SCSI management protocol (“SMP”) exchanges as a single SAS address.

### THE REFERENCES

The Examiner relies upon the following references as evidence in support of the obviousness rejections:

Badamo	US 2002/0181476 A1	Dec, 5, 2002
Barrow	US 2002/0188786 A1	Dec. 12, 2002
Bakke	US 2005/0071532 A1	Mar., 31, 2005
Seto	US 2005/0138202 A1	June 23, 2005

### THE REJECTIONS

1. The Examiner rejected claims 1-5, 12-14, 17, and 18 under 35 U.S.C. § 103(a), as being unpatentable over Bakke in view of Badamo and Seto.
2. The Examiner rejected claims 6-9 under 35 U.S.C. § 103(a) as being unpatentable over Bakke, in view of Badamo, Seto and Barrow.

### CLAIM GROUPINGS

Based on Appellants’ arguments in the Appeal Brief, we will decide the appeal on the basis of claims 1 and 6. *See* 37 C.F.R. § 41.37(c)(1)(vii).

### FINDINGS OF FACT

In our analysis *infra*, we rely on the following findings of fact (FF) that are supported by a preponderance of the evidence:

1. Bakke teaches a pair of edge expanders 0, 1, 102, used to interconnect a plurality of SAS initiators and devices. (Para. [0017]).
2. Badamo teaches that routing can be configured statically or can be determined dynamically by the line card. (Para. [0041])
3. Appellants admit that “the mere integration of previously distinct, discrete electronic components is not, without more, a patentable distinction.” (App. Br. 11)
4. Seto teaches PHYs (device objects that are used to interface to other devices and a physical interface). The PHYs are configured to have one SAS address “x”, which connect to PHYs in three different devices. (See Paras. [0004], [0023] and Fig. 5a).

### APPELLANTS’ CONTENTIONS

1. Appellants’ contend that the cited references fail to teach or suggest a Multi-Chip-Module (MCM) as claimed. (App. Br. 9).
2. Appellants contend that the cited references fail to teach or suggest coordination logic that provides static routing features as claimed. (App. Br. 11-12)

3. Appellants contend that the cited references fail to teach or suggest a MCM that comprises multiple SAS expander components that present themselves as a single SAS expander with a single SAS address in SMP exchanges. (App. Br. 13-14)

### ISSUES

Based upon our review of the administrative record, we have determined that the following issues are dispositive in this appeal:

1. Have Appellants shown the Examiner erred in finding that the cited references teach or suggest a Multi-Chip-Module (MCM)?
2. Have Appellants shown the Examiner erred in finding that the cited references teach or suggest coordination logic that provides static routing features?
3. Have Appellants shown the Examiner erred in finding that the cited references teach or suggest a MCM that comprises multiple SAS expander components that present themselves as a single SAS expander with a single SAS address in SMP exchanges?

### PRINCIPLES OF LAW

“[T]he examiner bears the initial burden on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Therefore, we look to Appellants' Brief to show error in the proffered prima facie case.

#### Obviousness under 35 U.S.C. § 103

In rejecting claims under 35 U.S.C. § 103, “[w]hat matters is the objective reach of the claim. If the claim extends to what is obvious, it is invalid under § 103.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U. S. 398, 419 (2007). To be nonobvious, an improvement must be “more than the predictable use of prior art elements according to their established functions.” *Id.* at 417.

*“The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art.” In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (emphasis added).

“[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. at 417 (2007) (quoting *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976)).

## ANALYSIS

Claims 1-5, 12-14, 17, and 18

### *Issue 1*

As noted above, Appellants contend that the cited references fail to teach or suggest a Multi-Chip-Module (MCM), as claimed. Further, Appellants contend that the Examiner's construction of the claimed MCM is overly broad. In support of their contention, Appellants submitted extrinsic evidence that purports to show what is meant by an MCM. We do not find Appellants' arguments to be persuasive for the reasons discussed *infra*.

We begin our analysis by noting that Appellants have acknowledged that the mere integration of previously distinct, discrete electronic components is not, without more, a patentable distinction. (FF 3). Appellants cannot now defeat an obviousness rejection by asserting that the cited references fail to teach or suggest integration of previously distinct, discrete electronic components. *See Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570 (Fed. Cir. 1988) ("A statement in a patent that something is in the prior art is binding on the applicant and patentee for determinations of anticipation and obviousness."); *In re Nomiya*, 509 F.2d 566, 571 n.5 (CCPA 1975) (It is a "basic proposition that a statement by an applicant, whether in the application or in other papers submitted during prosecution, that certain matter is 'prior art' to him, is an admission that that matter is prior art for all purposes . . .").



Moreover, we agree with the Examiner that the claim language provides a broader definition of the MCM and the elements thereof. We decline to consider the multiple dictionary definitions proffered by Appellants as extrinsic evidence. (App. Br. 9-11).<sup>2</sup> Therefore, we agree with the Examiner's findings that these elements are taught or suggested by Bakke. (See FF 1, Ans. 13 and 15). Accordingly, we do not find Appellants' arguments persuasive that the cited references fail to teach or suggest the claimed Multi-Chip-Module (MCM).

### *Issue 2*

Appellants contend that the cited references, most notably Badamo, fail to teach or suggest coordination logic that provides static routing features. Again, we disagree.

As noted above, Badamo specifically teaches that *routing can be configured statically* or can be determined dynamically by the line card. (FF 2) (emphasis added). It is our view that Badamo does more than just merely mention the word "static." We find Badamo teaches that the routing can be configured either way, i.e., dynamically, or statically, in order to make use of unused capacity. Therefore, we do not find Appellants' arguments to be persuasive that the cited references, most notably Badamo, fail to teach or suggest coordination logic that provides static routing features.

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<sup>2</sup> See 37 C.F.R. § 41.37(c)(1)(ix) (Reference to unentered evidence is not permitted in the Brief.).

*Issue 3*

Appellants contend that the Examiner erred in finding that the cited references teach or suggest a MCM that comprises multiple SAS expander components that present themselves as a single SAS expander with a single SAS address in SMP exchanges.

Based on the evidence before us, we essentially adopt the Examiner's rationale and findings as set forth in the Examiner's Answer (Ans. 16-17). We find that Bakke suggests a teaching of an MCM that comprises multiple SAS expanders. (FF 1). Seto is relied upon to provide a teaching of multiple SAS expanders, (PHYs) that respond as a single device. (FF 4).

As noted above, the test for obviousness is "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d at 425 (CCPA 1981). The Examiner's prima facie case relies upon the combined teachings of Bakke, Badamo and Seto that, in our view, reasonably teach or suggest the aforementioned argued limitations of claim 1. We further note that the Examiner's responsive arguments set forth in the Answer were not rebutted by Appellants (no Reply Brief was filed). Therefore, we do not find Appellants' arguments to be persuasive in establishing error in the Examiner's obviousness rejection.

Based on the record before us, Appellants have not shown that the Examiner erred in rejecting claims 1-5, 12-14, 17, and 18. Accordingly, we sustain the Examiner's first-stated rejection under 35 U.S.C. § 103(a).

### Claims 6-9

Regarding the Examiner's rejection of dependent claims 6-9 as being unpatentable over Bakke, in view of Badamo, Seto and Barrow,<sup>3</sup> we note that Appellants have not separately argued the patentability of claims 6-9. Therefore, we sustain the Examiner's rejection of these claims under 35 U.S.C. § 103(a) for the same reasons discussed *supra* regarding representative claim 1.

### CONCLUSIONS

Based on the findings of facts and analysis above, we conclude the following:

Appellants have not shown the Examiner erred in finding that the cited references teach or suggest a Multi-Chip-Module (MCM).

Appellants have not shown the Examiner erred in finding that the cited references teach or suggest coordination logic that provides static routing features.

Appellants have not shown the Examiner erred in finding that the cited references teach or suggest a MCM that comprises multiple SAS expander components that present themselves as a single SAS expander with a single SAS address in SMP exchanges.

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<sup>3</sup> Appellants' Brief combined claims 6-9 with the rejection of claims 1-5, 12-14, 17 and 18 discussed above. However, claims 6-9 were separately rejected in the Final Office Action and based on an additional reference.

DECISION

The decision of the Examiner rejections of claims 1-9, 12-14, 17, and 18 under 35 U.S.C. § 103(a) is sustained.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

pgc

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